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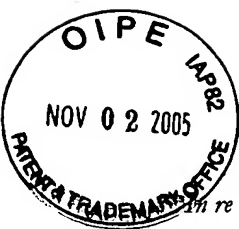
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| TRANSMITTAL FORM (to be used for all correspondence after initial filing) | Application Number | 10/751,736 | |
| | Filing Date | January 6, 2004 | |
| | First Named Inventor | R.V. MARTINEZ <i>et al.</i> | |
| | Group Art Unit | 1642 | |
| | Examiner Name | Lei Yao | |
| Total Number of Pages in This Submission | 5 | Attorney Docket Number | 031896-002000 (AM100927) |

| ENCLOSURES (check all that apply) | | |
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| Remarks | | <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees required or credit any overpayments to Deposit Account No. 19-2380 (031896-002000) for the above identified docket number. |

| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | |
|--|---|
| Firm or Individual name | Raymond Van Dyke, Registration No. 34,746 Nixon Peabody LLP 409 9 th Street, N.W. Suite 900 Washington, D.C. 20004-2128 |
| Signature | |
| Date | November 2, 2005 |

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Docket No. 031896-002000
(AM100927)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:)
Robert Vincent MARTINEZ *et al.*) Art Unit: 1642
Serial No.: 10/751,736) Examiner: Lei Yao
Filed: January 6, 2004) Confirmation No: 2977
For: COMPOSITIONS AND METHODS)
FOR DIAGNOSING AND TREATING)
COLON CANCERS)

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. § 1.56, Applicants hereby submit the following information in conformance with 37 C.F.R. §§ 1.97 and 1.98.

The instant Information Disclosure Statement is being filed pursuant to 37 C.F.R. § 1.97 (c) after a first office action on the merits but prior to the mailing date of a final office action, Notice of Allowance or an action that closes prosecution in the application.

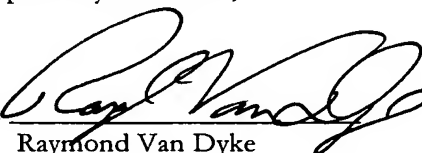
In view of the Official Gazette Notice dated August 5, 2003, copies of the cited U.S. patent documents are not included with this Statement. However, copies of the cited foreign patent and non-patent literature documents, as well as the International Search Report from a related international patent application, are enclosed.

It is requested that the accompanying PTO-1449 be considered and made of record in the above-identified application. It is respectfully requested that an Examiner-initialed copy of this form be returned to the undersigned.

The Commissioner is hereby authorized to charge any fees connected with this filing, which may be required now, or credit any overpayment to Deposit Account No. 19-2380.

Respectfully submitted,

Date: November 2, 2005

By: 
Raymond Van Dyke
Registration No. 34,746

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| | | | | Application Number | 10/751,736 |
| | | | | Filing Date | January 6, 2004 |
| | | | | First Named Inventor | R. V. MARTINEZ <i>et al.</i> |
| | | | | Art Unit | 1642 |
| | | | | Examiner Name | Lei Yao |
| Sheet | 1 | of | 3 | Attorney Docket Number | 031896-002000 (AM100927) |

| U.S. PATENT DOCUMENTS | | | | | |
|-----------------------------------|--------------------------|--|--------------------------------|--|--|
| Examiner Initials ⁵ | Cite No. ¹ | U.S. Patent Document | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | Number - Kind Code ² (if known) | | | |
| | | U.S. - 5,965,403 | 07-06-1999 | TULLIS, R. H. | |
| | | U.S. - 6,506,559 | 01-14-2003 | FIRE, A. <i>et al.</i> | |
| | | U.S. - 4,554,101 | 11-19-1985 | HOPP, T.P. | |
| | | U.S. - 4,419,446 | 01-14-2003 | FIRE, A. <i>et al.</i> | |
| | | U.S. - 4,798,885 | 11-19-1985 | HOPP, T.P. | |
| | | U.S. - 5,141,905 | 10-17-1995 | MODRICH, P. <i>et al.</i> | |

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| FOREIGN PATENT DOCUMENTS | | | | | | |
|-----------------------------------|--------------------------|---|--------------------------------|--|---|----------------|
| Examiner Initials ⁵ | Cite No. ¹ | Foreign Patent Document | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ⁶ |
| | | Country Code ³ Number ⁴ Kind Code ² (if known) | | | | |
| | | WO 03/009814 A2 | 02-06-2003 | SCHLEGEL, R. <i>et al.</i> | | |
| | | WO 99/497354 A1 | 10-07-1999 | KRUH, G. <i>et al.</i> | | |
| | | WO 04/016810 A2 | 02-26-2004 | SCHWIDETZKY, U. | | |
| | | WO 03/104404 A2 | 12-18-2003 | EBNER, R. | | |
| | | WO 02/079238 A2 | 10-10-2002 | EULENBERG, K. <i>et al.</i> | | |

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| OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS | | | |
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| | | BURGER, M. J. <i>et al.</i> , Expression analysis of δ -catenin and prostate-specific membrane antigen: their potential as diagnostic markers for prostate cancer, <i>Int. J. Cancer</i> , 100(2):228-237, 2002 | |
| | | CHEN, Z.-S. <i>et al.</i> , Analysis of Methotrexate and Folate Transport by Multidrug Resistance Protein 4 (ABCC4): MRP4 Is a Component of the Methotrexate Efflux System, <i>Cancer Res.</i> , 62:3144-3150, 2002 | |

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| | | | | Art Unit | 1642 |
| | | | | Examiner Name | Lei Yao |
| Sheet | 2 | of | 3 | Attorney Docket Number | 031896-002000 (AM100927) |

| OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS | | | | |
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| | | COLSTON, J. T. <i>et al.</i> , Ca ²⁺ channel alpha 1-subunit transcripts are differentially expressed in rat pheochromocytoma (PC12) cells following nerve growth factor treatment, <i>Int. J. Dev. Neurosci.</i> , 16(5):379-389, 1998 | | |
| | | DJAMSHIDIAN, A. <i>et al.</i> , Altered expression of voltage-dependent calcium channel alpha(1) subunits in temporal lobe epilepsy with Ammon's horn sclerosis, <i>Neuroscience</i> , 111(1):57-69, 2002 | | |
| | | EPSTEIN, L. H. <i>et al.</i> , Dopamine transporter genotype as a risk factor for obesity in African-American smokers, <i>Obes. Res.</i> , 10(12):1232-1240, 2002 | | |
| | | FEIGELSTOCK, D. <i>et al.</i> , The human homolog of HAVcr-1 codes for a hepatitis A virus cellular receptor, <i>J. Virol.</i> , 72(8):6621-6628, 1998 | | |
| | | HONKE, K. <i>et al.</i> , Cancer-associated Expression of Glycolipid Sulfotransferase Gene in Human Renal Cell Carcinoma Cells, <i>Cancer Res.</i> , 58(17):3800-3805, 1998 | | |
| | | ICHIMURA, T. <i>et al.</i> , Kidney injury molecule-1 (KIM-1), a putative epithelial cell adhesion molecule containing a novel immunoglobulin domain, is up-regulated in renal cells after injury, <i>J. Biol. Chem.</i> , 273(7):4135-4142, 1998 | | |
| | | KATSURA, M. <i>et al.</i> , Up-regulation of L-type voltage-dependent calcium channels after long term exposure to nicotine in cerebral cortical neurons, <i>J. Biol. Chem.</i> , 277(10):7979-7988, 2002 | | |
| | | LAI, L. and TAN, T. M., Role of glutathione in the multidrug resistance protein 4 (MRP4/ABCC4)-mediated efflux of cAMP and resistance to purine analogues, <i>Biochem. J.</i> , 361(Pt. 3):497-503, 2002 | | |
| | | LAUNAY, P. <i>et al.</i> , TRPM4 is a Ca ²⁺ -activated nonselective cation channel mediating cell membrane depolarization, <i>Cell</i> , 109(3):397-407, 2002 | | |
| | | LERMAN, C. <i>et al.</i> , Evidence suggesting the role of specific genetic factors in cigarette smoking, <i>Health Psychol.</i> , 18(1):14-20, 1999 | | |
| | | LOCKHART, D. J. <i>et al.</i> , Expression monitoring by hybridization to high-density oligonucleotide arrays, <i>Nat. Biotechnol.</i> , 14(13):1675-1680, 1996 | | |
| | | MYERS, R. M. <i>et al.</i> , Detection of single base substitutions by ribonuclease cleavage at mismatches in RNA:DNA duplexes, <i>Science</i> , 230:1242-1246, 1985 | | |
| | | RANALDI, G. <i>et al.</i> , Intracellular distribution of labile Zn(II) and zinc transporter expression in kidney and MDCK cells, <i>Am. J. Physiol. Renal Physiol.</i> , 283(6):F1365-F1375, 2002 | | |

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| | | SEGMAN, R. H. <i>et al.</i> , Association between the dopamine transporter gene and posttraumatic stress disorder, <i>Mol. Psychiatry</i> , 7(8):903-907, 2002 | |
| | | SONG, E., RNA interference targeting Fas protects mice from fulminant hepatitis, <i>Nat. Med.</i> , 9(3):347-351, 2003 | |
| | | TENG, D. H. <i>et al.</i> , Mutation analyses of 268 candidate genes in human tumor cell lines, <i>Genomics</i> , 74(3):352-364, 2001 | |
| | | UTHOFF, S. M. <i>et al.</i> , T-cell receptor γ : a microsatellite marker for colorectal cancer, <i>Ann. Surg. Oncol.</i> , 9(1):88-93, 2002 | |
| | | VAN AUBEL, R. A. <i>et al.</i> , The MRP4/ABCC4 gene encodes a novel apical organic anion transporter in human kidney proximal tubules: putative efflux pump for urinary cAMP and cGMP, <i>J. Am. Soc. Nephrol.</i> , 13 (3):595-603, 2002 | |
| | | WYATT, C. N. <i>et al.</i> , Voltage-dependent binding and calcium channel current inhibition by an anti-alpha 1D subunit antibody in rat dorsal root ganglion neurones and guinea-pig myocytes, <i>J. Physiol.</i> , 502 (Pt 2):307-319, 1997, Erratum in: <i>J. Physiol. (Lond)</i> , 503(Pt 3):699, 1997 | |
| | | XU, L. L. <i>et al.</i> , PSGR, a novel prostate-specific gene with homology to a G protein-coupled receptor, is overexpressed in prostate cancer, <i>Cancer Res.</i> , 60(23):6568-6572, 2000 | |
| | | YAMADA, Y. <i>et al.</i> , Genomic variation in pancreatic ion channel genes in Japanese type 2 diabetic patients, <i>Diabetes Metab. Res. Rev.</i> , 17(3):213-216, 2001 | |
| | | YUAN, T. T. <i>et al.</i> , Cloning and genetic characterization of an evolutionarily conserved human olfactory receptor that is differentially expressed across species, <i>Gene</i> , 278(1-2):41-51, 2001 | |
| | | ZELCER, N. <i>et al.</i> , Steroid and bile acid conjugates are substrates of human multidrug-resistance protein (MRP) 4 (ATP-binding cassette C4), <i>Biochem. J.</i> , 371(Pt 2):361-367, 2003 | |
| | | Affymetrix GeneChip® Expression Analysis, Data Analysis Fundamentals | |
| | | Affymetrix GeneChip® Expression Analysis, Technical Manual | |
| | | PCR: A Practical Approach, McPherson, M. J. and Hames, B. D. (eds), IRL Press, at Oxford University Press, Inc., Oxford, England, 1991 | |
| | | PCR2: A Practical Approach, McPherson, M. J. and Hames, B. D. (eds), IRL Press, at Oxford University Press, Inc., Oxford, England, 1995 | |
| | | PCR Protocols: Current Methods and Applications, In: Methods in Molecular Biology, Vol. 15, White, Bruce Alan (ed.), Humana Press, Totowa, N.J. 1993 | |
| | | Partial International Search Report for PCT/US2004/015645, mailed 10/25/2005, 2 pages | |
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